Safety Data Sheet Michel's Wash Solution

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SECTION 1: Identification

GHS Product identifier

Product name	Michel's Wash Solution
Product number	AMMW
Brand	Australian Biostains

Michel's Wash Buffer Solution
1576/

Recommended use of the chemical and restrictions on use

Laboratory and analytical reagent.

Supplier's details

Name	ChemSupply Australia Pty Ltd
Address	38-50 Bedford Street 5013 Gillman South Australia Australia
Telephone	08 8440 2000
email	www.chemsupply.com

National contact

Name	Australian Biostains Pty Ltd
Address	24 - 28 Stratton Drive 3844 Traralgon VIC Australia

Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

SECTION 2: Hazard identification

General hazard statement

Not classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as non-Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 7

Not a hazardous substance or mixture.

GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

Mixtures

Other components either not classified as Hazardous under the GHS, or below cut-off concentrations to be classified as Hazardous.

Components

Component	CAS no.	Concentration
Citric acid monohydrate (EC no.: 201-069-1)	**5949-29-1**	**<= 0.5 % (weight)**
CLASSIFICATIONS: Serious eye damage/eye irritation, Cat. 2A. HAZARDS: H319 - Causes serious eye irritation.		
N-Ethylmaleimide (EC no.: 204-892-4)	**128-53-0**	**<= 0.1 % (weight)**
CLASSIFICATIONS: Acute toxicity, dermal, Cat. 3; Acute toxicity, oral, Cat. 2; Skin corrosion/irritation, Cat. 1B; Skin sensitizer, Cat. 1. HAZARDS: H300 - Fatal if swallowed; H311 - Toxic in contact with skin; H314 - Causes severe skin burns and eye damage; H317 - May cause an allergic skin reaction.		

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
	First Aid Facilities: Maintain eyewash fountain in work area.
If inhaled	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
In case of skin contact	Irritation unlikely. If irritation occurs wash with plenty of soap and water.
In case of eye contact	If in eyes wash out immediately with water.
If swallowed	If swallowed, do NOT induce vomiting.

Most important symptoms/effects, acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary
Treat symptomatically based on judgement of doctor and individual reactions of the patient.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Specific Methods: Small fire: Use dry chemical, CO2, water spray or foam.
Large fire: Use water spray, fog or foam.
If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out.

Specific hazards arising from the chemical
Carbon oxides

Special protective actions for fire-fighters
Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. Fight fire from safe location.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation. Use personal protective equipment. For personal protection see section 8.

Methods and materials for containment and cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Precautions for safe handling
Use personal protective equipment as required. Keep container closed when not in use. Never return spills in original containers for re-use. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well-ventilated area, out of direct sunlight. Store in suitable, labelled containers. Keep containers tightly closed. Store away from incompatible materials. Ensure that storage conditions comply with applicable local and national regulations.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls
Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.f the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Skin protection
Clean impervious clothing should be worn. Clothing for protection against
chemicals should comply with AS 3765 Clothing for Protection Against Hazardous
Chemicals.

Hand Protection: Normally not required but if in doubt ensure hand protection should complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

Body protection
Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Respiratory protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/ mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be

made to Australian Standards AS/ NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear liquid.
Color	Colourless
Odor	Odourless.
Odor threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidizing properties	No data available.
pH	No data available.
Kinematic viscosity	No data available.
Solubility	Solubility in Water: Completely.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	No data available.
Relative vapor density	No data available.
Particle characteristics	No data available.

Supplemental information regarding physical hazard classes
No data available.

Further safety characteristics (supplemental)
No data available.

SECTION 10: Stability and reactivity

Reactivity
Stable under normal conditions of storage and handling.

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
None under normal use conditions.

Conditions to avoid
Avoid storing in direct sunlight and avoid extremes of temperature.

Incompatible materials
Oxidizing agents, Bases, Reducing agents, Nitrates

Hazardous decomposition products

Other decomposition products - No data available In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Ingestion: Significant oral exposure is considered to be unlikely. Unlikely to causes any irritation problems.

Inhalation: Unlikely to cause any irritation or discomfort.

Skin corrosion/irritation
No adverse effects expected.

Serious eye damage/irritation
Believed to be non irritating to the eyes.

Respiratory or skin sensitization
Not expected to be a respiratory or skin sensitiser.

Germ cell mutagenicity
No data available

Carcinogenicity
No data available

Reproductive toxicity
No data available

Specific target organ toxicity (STOT) - single exposure
No data available

Specific target organ toxicity (STOT) - repeated exposure
No data available

Aspiration hazard
Not expected to be an aspiration hazard.

Additional information

Citric acid monohydrate: rat LD50 intraperitoneal 375mg/kg (375mg/kg) National Technical Information Service. Vol. AD-A121-876,

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N-Ethylmaleimide: CAS# 128-53-0: UX9625000
LD50/LC50:
CAS# 128-53-0:
Dermal, guinea pig: LD50 = 500 mg/kg;
Oral, mouse: LD50 = 25 mg/kg;
Oral, rat: LD50 = 25 mg/kg;
.

Carcinogenicity:
CAS# 128-53-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.
Teratogenicity: No information available.
Reproductive Effects: No information available.
Mutagenicity: DNA Inhibition: hamster lung 750nmol/L; human cell types 6umol/L; mouse cell types 300umol/L; rat liver 2umol.
Neurotoxicity: No information available.
Other Studies:

From NIH:
guinea pig LD50 skin 500mg/kg (500 mg/kg) National Technical Information Service. Vol. OTS0536969,
mouse LD50 intraperitoneal 5mg/kg (5 mg/kg) BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY) National Technical Information Service. Vol. OTS0536969,
mouse LD50 oral 25mg/kg (25 mg/kg) BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY) National Technical Information Service. Vol. OTS0536969,
rat LD50 intraperitoneal 1mg/kg (1 mg/kg) BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY) National Technical Information Service. Vol. OTS0536969,
rat LD50 oral 25mg/kg (25 mg/kg) BEHAVIORAL: SOMNOLENCE (GENERAL DEPRESSED ACTIVITY)

BEHAVIORAL: CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD National Technical Information Service. Vol. OTS0536969,
rat LDLo intracrebral 1669ug/kg (1.669 mg/kg) Journal of Medicinal Chemistry. Vol. 15, Pg. 534, 1972.

From Sigma MSDS:

Hazard Codes T+

Risk Statements 21-28-34-43

Safety Statements 26-28-36/37/39-45

RIDADR UN 2928 6.1/PG 2

WGK Germany 3

RTECS UX9625000

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SECTION 12: Ecological information

Toxicity
No data available.

Persistence and degradability
No data available.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Results of PBT and vPvB assessment
No data available.

Endocrine disrupting properties
No data available.

Other adverse effects
No data available.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

Other disposal recommendations
Do not discharge this material into waterways, drains and sewers.

SECTION 14: Transport information

ADG (Road and Rail)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Australia SUSMP
Poison Schedule: NS

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canadian Domestic Substances List (DSL)
Chemical name: 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, monohydrate
CAS: 5949-29-1

Chemical name: Sulfuric acid magnesium salt (1:1), heptahydrate
CAS: 10034-99-8

Chemical name: 1H-Pyrrole-2,5-dione, 1-ethyl-
CAS: 128-53-0

Chemical name: Water
CAS: 7732-18-5

Chemical name: Potassium hydroxide (K(OH))
CAS: 1310-58-3

Chemical name: Sulfuric acid diammonium salt
CAS: 7783-20-2

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Potassium hydroxide
CAS-No. 1310-58-3

New Jersey Right To Know Components
Citric acid monohydrate
CAS-No. 5949-29-1

Water
CAS-No. 7732-18-5

Potassium hydroxide
CAS-No. 1310-58-3

Pennsylvania Right To Know Components
Citric acid monohydrate
CAS-No. 5949-29-1

Water
CAS-No. 7732-18-5

Potassium hydroxide
CAS-No. 1310-58-3

Chemical name: Sulfuric acid diammonium salt
CAS number: 7783-20-2

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards
Acute Health Hazard

No SARA Hazards

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SECTION 16: Other information

Further information/disclaimer
ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended.

Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

Preparation information

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia
National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'
Safe Work Australia, 'National Code of Practice fot the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.
Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.
Safe Work Australia, Workplace Exposure Standards for Airbourne Contaminants, December 2019
Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au
IATA, Dangerous Goods Regulations (DGR)
IMO, International Maritime Dangerous Goods Code (IMDG)